Please amend the application as follows:

In the Claims

Please cancel Claim 29.

Please amend Claims 1, 11, 12, 16, 26, 27, 31 and 40.

1.   (Twice Amended) A router including buffers, for information units transferred through the router, comprising:

a first set of rapidly accessible buffers which store information units received at an input link; and

a second set of buffers for the information units that are accessed more slowly than the first set;

the first set of buffers operating as a cache with information units being evicted to the second set of buffers according to an algorithm other than order of receipt in the first buffer.

11.   (Amended) A router including buffers, for information units transferred through the router, comprising:

a first set of rapidly accessible buffers which store information units received at an input link;

a second set of buffers for the information units that are accessed more slowly than the first set; and

miss status registers to hold information units waiting for access to the second set of buffers.

12.   (Amended) A router including buffers, for information units transferred through the router, comprising:

a first set of rapidly accessible buffers which store information units received at an input link;

a second set of buffers for the information units that are accessed more slowly than the first set; and

an eviction buffer to hold entries staged for transfer from the first set of buffers to the second set of buffers.

16. (Twice Amended) A method of buffering information units in a router comprising:

storing the information units received at an input link in a first set of rapidly accessible buffers; and

storing overflow from the first set of buffers in a second set of buffers that are accessed more slowly than the first set;

the first set of buffers operating as a cache with information units being evicted to the second set of buffers according to an algorithm other than order of receipt in the first buffer.

26. (Twice Amended) A method of buffering information units in a router comprising:

storing the information units received at an input link in a first set of rapidly accessible buffers;

storing overflow from the first set of buffers in a second set of buffers that are accessed more slowly than the first set; and

storing information units waiting for access to the second set of buffers in miss status registers.

27. (Amended) A method of buffering information units in a router comprising:

storing the information units received at an input link in a first set of rapidly accessible buffers;

storing overflow from the first set of buffers in a second set of buffers that are accessed more slowly than the first set; and

storing information units staged for transfer from the first set of buffers to the second set of buffers in an eviction buffer.

31.   (Twice Amended) A network comprising a plurality of interconnected routers, each router including information unit buffers comprising:

a first set of rapidly accessible information unit buffers which store information units received at an input link; and

a second set of information unit buffers which store the information units and that are accessed more slowly than the first set;

the first set of buffers operating as a cache with information units being evicted to the second set of buffers according to an algorithm other than order of receipt in the first buffer.

40.   (Twice Amended) A router comprising:

means for storing information units received at an input link in a first set of rapidly accessible buffers; and

means for storing information units in a second set of buffers that are accessed more slowly than the first set;

the first set of buffers operating as a cache with information units being evicted to the second set of buffers according to an algorithm other than order of receipt in the first buffer.

Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages i - iii).

REMARKS

The Examiner suggested that Figure 4 be designated by a legend such as "Prior Art." Reconsideration is requested. Although Figure 4 illustrates prior routers designed by applicant, it is not necessarily prior art. Such routers are presented in U.S. Patent 6,285,679, assigned to the assignee of this invention, but that Patent did not issue until after the filing date of this application.